

A saddle pad consisting of a series of cloths or sections, having holes or openings, at their forward ends, metal eyes seated in said openings, said metal eyes securing tabs of leather upon the edges of the cloths, and rings connecting the cloths, as set forth.

No. 22,038. Pop Gun. (*Fusil jouet.*)

Elijah J. B. Whitaker, New York, N.Y., U.S., 9th July, 1885; 5 years.

Claim.—1st. A self-charging pop-gun consisting of an open-ended tube, a plunger working in said tube, a plug or stopper adapted to close one end thereof, and a cord or rod coupling the stopper with the plunger and permitting a limited movement of the two, substantially in the manner and for the purpose herein set forth. 2nd. A double-acting self-charging pop-gun consisting of an open-ended tube, a plunger working in said tube, a rod actuating said plunger, and extending out from one end of the tube, a plug or stopper moving upon said rod and adapted to close the end of the tube and to be driven to its seat by an off-set or shoulder on the rod, and a second plug or stopper adapted to close the opposite end of the tube, and which is coupled to the plunger by a cord or rod permitting a limited independent movement of the two, all substantially in the manner and for the purpose herein set forth.

No. 22,039. Feed Water Purifier.

(*Epurateur de l'Eau d'Alimentation.*)

Philip J. Grau, Philadelphia, Penn., U.S., 9th July, 1885; 5 years.

Claim.—1st. A steam boiler, in combination with a feed-water purifier, consisting of two compartments, located one above the other, the upper of said compartments opening into the bottom of the lower compartment by means of a pipe, and being on a level with the water in the boiler, whereby said chamber is partly full of water, a feed-water pipe and a steam pipe to feed water and steam into the upper compartment, and an exit water pipe opening from said lower chamber, near its top, substantially as and for the purpose specified. 2nd. A feed water purifier consisting of two compartments, located one above the other, the upper of said compartments opening into the bottom of the lower compartment by means of a pipe opening from the upper compartment below the level of the water therein, a feed-water pipe and a steam pipe to feed water and steam into the upper compartment, and an exit water-pipe opening from said lower chamber near its top, substantially as and for the purpose specified. 3rd. A feed-water purifier consisting of two compartments located one above the other, the upper of said compartments opening into the bottom of the lower compartment by means of a pipe, a feed-water pipe and a steam pipe to feed water and steam with the upper compartment, and an exit water-pipe opening from the lower chamber near its top, the said feed-water pipe passing down and up through the hot water in said upper compartment, substantially as and for the purpose specified. 4th. A feed-water purifier, consisting of two compartments, located one above the other, the upper of said compartments opening into the bottom of the lower compartment by means of a pipe below the level of the water therein, a feed-water pipe and a steam pipe opening from the boiler to feed water and steam into the upper compartment, and an exit water-pipe opening from said lower chamber, near its top, said feed-water pipe being provided with means to spray or subdivide the water, substantially as and for the purpose specified. 5th. A feed-water purifier, consisting of two compartments, located one above the other, the upper of said compartments opening into the bottom of the lower compartment by means of a pipe opening from the upper compartment below the level of the hot water therein, a feed-water pipe and a steam pipe to feed water and steam into the upper compartment, an exit water pipe opening from said lower chamber, near its top, the said feed water pipe passing down and up through the hot water in said upper compartment, and provided with means to spray said water, substantially as and for the purpose specified. 6th. A feed-water purifier, consisting of two compartments, located one above the other, the upper of said compartments opening into the bottom of the lower compartment by means of a pipe, a feed-water pipe, and a steam pipe to feed water and steam into the upper compartment, an exit water pipe opening from said lower chamber, near its top, and a blow-off exit from its bottom, substantially as and for the purpose specified. 7th. The combination of the section C, D, pipe E, wholly submerged in the feed-water, steam pipe I, water pipe H, and a feed water pipe to section C, substantially as and for the purpose specified. 8th. The combination of sections C, D, pipe E, steam pipe I, water pipe H, and a feed-water pipe to section C, consisting of pipes L, L', cap M, and spiders N, substantially as and for the purpose specified. 9th. The combination of sections C, D, pipe E, steam pipe I, water pipe H, and a feed-water pipe to section C, consisting of pipes L, L', cap M, and spiders N, substantially as and for the purpose specified. 10th. The combination of section C, D, pipe E, wholly submerged in the feed-water, steam pipe I, water pipe H, blow-off F, G, and a feed-water pipe to section C, substantially as and for the purpose specified. 11th. The combination of sections C, D, pipe E wholly submerged in the feed-water, steam pipe I, water pipe H, steam pipe P, injector or pump R, pipe L, and a feed-water pipe D, section C, substantially as and for the purpose specified. 12th. The combination of sections C, D, pipe E, wholly submerged in the feed-water, steam pipe I, and J, water pipe H, and a feed-water pipe D, section C, substantially as and for the purpose specified. 13th. The combination of sections C, D, pipe E, steam pipe I, water pipe H, and a feed-water pipe D, section C, consisting of pipes L, L', and water-gauge K, substantially as and for the purposes specified. 14th. The combination of sections C, D, pipe E, tubes or apertures e, or their equivalent, steam pipe I, water pipe A, and a feed-water pipe to section C, substantially as and for the purpose specified.

No. 22,040. Faucet. (*Canule.*)

Eliza U. Scoville, Manlius, N.Y., U.S., 9th July, 1885; 5 years.

Claim.—1st. A faucet barrel, provided at its discharge end with a convex face described, from a point back of said face, arms pivoted at said point and rigidly united in front of the convex face, and a

valve removably connected with and carried by the said arms, substantially as described and shown. 2nd. The combination, with a faucet barrel provided at its discharge end with a convex face, of arms hinged to opposite sides of the barrel, and rigidly united in front of the convex face, a valve interposed between the junction of the arms and convex face of the barrel, and a spring applied to the back of the valve, substantially as and for the purpose set forth. 3rd. The combination of the faucet barrel, provided with trunnions back of its discharge end, and having the face of the latter in the form of a segment described from the trunnions, a gate hung on said trunnions and having in front of the face of the faucet-barrel a handle provided with a socket, a valve having a segmental face fitted to the face of the barrel, and provided with a stem entering the socket of the handle, and a spiral spring surrounding said stem and bearing on the end of the socket and back of the valves, substantially as described and shown. 4th. In combination with the faucet-barrel provided with trunnions at opposite sides back of the discharge end, a gate formed of two longitudinal sections clamped together and hung on the trunnions, and formed in front of the discharge end of the faucet with a handle, and with a socket in said handle, a valve provided with a segmental face fitted to the face of the faucet barrel, and having a stem projecting into the socket of the handle, and a spring in the socket to force the valve toward the face of the faucet-barrel, all substantially as described and shown.

No. 22,041. Mechanical Motor.

(*Moteur Mécanique.*)

Adéland F. Martel, Montreal, Que., 9th July, 1885; 5 years.

Claim.—1st. A rotary motor, composed of annular discs mounted on a shaft, and carrying in grooves or guides across them, weights which are automatically wound up through said grooves, released and fall down at or near the periphery, all substantially as described. 2nd. In a rotary motor, the combination of annular discs having grooves, or guides in which weights slide, cords or like devices passing over sheaves and connecting said weights with drums carried in annular disc, loose gears or spindles of said drums intermeshing with teeth in face of a stationary ring, and intermittently and automatically thrown in and out of clutch with said drums, as and for the purposes described. 3rd. The combination with a drum, to which are fastened the cords attached to the weights, of a gear wheel mounted loosely on its spindle, and intermeshing with the teeth on face of stationary wheel, and a clutch actuated by a pivoted lever working in an uneven groove in the periphery of said stationary ring and operating to throw the loose gear wheel in and out of operation, all substantially as set forth.

No. 22,042. Machine for Filing Saws.

(*Machine pour Limer les Scies.*)

Samuel C. Rogers, Hamilton, Ont., 9th July, 1885; 5 years.

Claim.—1st. The combination of an oscillating frame B, emery wheel or file c, lever D, and the adjustable stops m' and o, substantially as described. 2nd. An oscillating frame B, frame A, emery wheel c, lever D and adjustable stops m' and o, substantially as described. 3rd. The combination of the legs A, frame A, oscillating frame B, emery wheel C, lever D, and adjustable stops m' and o, substantially as described. 4th. The combination of the legs A, oscillating frame B, emery wheel C, slotted arm e, lever D provided with pawl d' and templet m, substantially as described. 5th. The combination of the legs A, frame A, oscillating frame B, emery wheel C, slotted arm e, check L, lever d, and adjustable stops m' and o, substantially as described. 6th. In combination with the legs A and frame A, the oscillating frame B, emery wheel C, slotted arm e, lever D, provided with pawl d' and templet m, substantially as described. 7th. The combination of a concave base F, convex block G, and cone c, substantially as described. 8th. The combination of a slotted arm e, concave base F, convex block z and cone c, substantially as described. 9th. The combination of a lever D, pawl d and templet m, substantially as described. 10th. The combination of a lever support a, lever stop P, lever D, pawl d' and templet m, substantially as described. 11th. The combination of a lever D, pawl d', templet m and oscillating frame B, substantially as described. 12th. The combination of check L, slotted arm e, oscillating frame B, lever D, pawl d, and templet m, substantially as described.

No. 22,043. Combined Type Setting and Redistributing Machine. (*Machine à Poser et Distribuer les Caractères.*)

William Forrest, Bradford, Ont., 9th July, 1885; 5 years.

Claim.—1st. A series of type magazines arranged in rows along the radii of a circle, and supported above a table having a series of holes or stops arranged on its surface along the radii of a circle struck from the same centre as the circle in which the magazines are set, in combination with a frame arranged to carry a type-box or stick, and adjustably pivoted on the centre of the magazine circle, the said type-box frame being provided with mechanism by which the type may be separately discharged from the magazine into the type-box. 2nd. A series of type magazines, A, arranged within a frame B, and pivotally connected by the arm C to the table D, substantially as and for the purpose specified. 3rd. A series of type-magazines A, each magazine being divided into two parts, and detachably connected together by a band E, rigidly fastened to the ends of one-half, substantially as and for the purpose specified. 4th. A type magazine A, having pivoted on its lower end a plate H, provided with projections h, arranged to extend into the interior of the magazine, and a spring I, to actuate the said plate, so as to hold the lower projection h into the interior of the magazine and the upper projection h, clear of it, in combination with the lever N, pivoted to the frame J, and arranged to actuate the plate H, substantially as and for the purpose specified. 5th. The frame J, adjustably pivoted by means of the sleeve K on the table D, in the centre of the circle on which the rows of type magazines A are set, in combination with the lever N, pivoted on the frame J, and having a knife-edged end S to engage with the plate H, and a